

INTRODUCTION

In 1907, a spectacular flash of fiery white light and the flow of molten iron emanated from two newly commissioned blast furnaces on the Monongahela River, solidifying Pittsburgh and its surrounding boroughs as the epicenter of American heavy industry. The new Carrie Blast Furnaces Nos. 6 and 7 were the product of technological advancements designed and implemented by the engineering genius of Pittsburghers, as part of the Homestead Steel Works. The furnaces' production was fueled by raw materials mined in southwestern Pennsylvania coalfields and transported by the rails and rivers that connected dozens of other mining and mill towns. Their output was enabled by the tens of thousands of workers who arrived through waves of immigration from Europe, and the Great Migration of African Americans from the Deep South. Pittsburgh became the center of America's Second Industrial Revolution, and the steel produced here built iconic skyscrapers, bridges, railroads, battleships, and other implements of "the Arsenal of Democracy." Over the next century, Pittsburgh achieved its iconic national status as the "Steel City," a people and a product inextricably intertwined.

Now—more than four decades after the furnaces ceased operations—Rivers of Steel Heritage Corporation is embarking on an ambitious new campaign to leverage the site's significant cultural and heritage capital, both at the Carrie Blast Furnaces site and throughout the eight-county Rivers of Steel National Heritage Area. In this vision, the Carrie Blast Furnaces—among the last of the pre-WWII blast furnaces in the U.S. still standing—will once again become a strategic hub, not for steel production, but for historic sites, heritage assets, arts organizations, and communities throughout the Rivers of Steel National Heritage Area. Rivers of Steel intends for the Carrie Blast Furnaces site to serve as a catalyst for communities seeking the same economic development benefits enjoyed by the city of Pittsburgh, through heritage and cultural tourism, arts programming, and workforce development initiatives.

The reimagined Carrie Blast Furnaces site will interpret 150 years of industrial heritage through the prisms of history, culture, science, and the arts, drawing visitors from southwestern Pennsylvania and beyond, and directing them to Rivers of Steel Heritage Partner sites. Rivers of Steel will present the Carrie Blast Furnaces as an exemplar of Pittsburgh and American innovation in the nineteenth and early twentieth centuries; portray the devastating socioeconomic consequences of the U.S. steel industry's decline for the former mill towns that line the Monongahela River Valley; and showcase Rivers of Steel's unique approach to creative placemaking, Metal Arts, Graffiti Arts, and Heritage Arts, in order to stem the narrative of decline and demonstrate a pathway to urban revitalization.



THE VISION

Working in agreement with the Redevelopment Authority of Allegheny County, Rivers of Steel will soon assume full ownership of the Carrie Blast Furnaces National Historic Landmark—a monument of profound historical, cultural, and symbolic significance—for which it has served as steward since 2010.

In preparation for this historic transition, Rivers of Steel has crafted a bold vision for the future of the site and its role as the center of the Rivers of Steel National Heritage Area.



That vision is defined by three pillars of investment:

- 1. The careful **PRESERVATION** of its irreplaceable, nationally significant, historic structures;
- 2. Meaningful **ENHANCEMENTS**, including the addition of substantial new infrastructure; and
- 3. Accelerated **SITE ACTIVATION** through vibrant program expansion and by positioning the furnaces as both a beacon and a conduit, via a "hub and spoke" strategy that centers the furnaces within the network of historic and cultural sites contained in the eight-county Rivers of Steel National Heritage Area.

The reimagined Carrie Blast Furnaces National Historic Landmark site will offer stabilized historic structures, a repurposed visitor center and exhibition spaces, metal and graffiti arts facilities, multiuse educational areas, and welcoming community green space and river access. The site will serve as a unique, world-class destination for exploring industrial history, cultural heritage, and the arts, welcoming both the local community and visitors from far and wide. Additionally, this work will enhance the neighboring brownfields' redevelopment underway by the Redevelopment Authority of Allegheny County (RAAC) and the Regional Industrial Development Corporation (RIDC). This will bring new commercial activity to the historic site and its reimagined network of riverfront trails and community spaces.

In the coming year, Rivers of Steel will undertake a robust capital campaign to identify and secure the funding necessary to realize this vision.

PILLAR 1: PRESERVATION

Rivers of Steel's continuous stewardship, restoration, and maintenance of the Carrie Blast Furnaces site has helped mitigate significant deterioration, but additional structural repairs and recurring maintenance are needed to increase accessibility and stabilize the historic structures on the site. Regular engineering surveys of the Carrie Blast Furnaces and adjoining structures continue to identify areas in urgent need of attention; as the highest priority repairs are addressed, other areas are attended to as staff and capital resources allow. This stems from the site sitting abandoned and neglected for more than twenty years following the mill's closure, leaving Rivers of Steel to play catch-up with deferred maintenance since assuming stewardship of the site in 2010. Rivers of Steel works constantly to address the high-priority areas identified as critical to structural integrity while keeping as much of the site open and accessible to the public as possible.

Carrie Furnaces Stabilization

A comprehensive restoration plan calls for stabilizing and renovating the historic furnaces' structure and adjoining areas, and installing visitor-focused safety infrastructure to enhance site accessibility while mitigating safety risks. These efforts focus primarily on the furnace works themselves, including cast house #6, stove decks, and related structures—along with the AC Power House and Blowing Engine House.

Once stabilized and renovated, the cavernous industrial spaces celebrated for producing the iron (and subsequently steel) used to build the nation's great skyscrapers, including the Empire State Building and mighty warships like the U.S.S. Missouri, will be safely and increasingly accessible by the public and used for expanded programs and events for years to come. This requires funding to address critical stabilization issues in the short term and creation of a preservation fund to ensure Rivers of Steel's ability to undertake necessary maintenance and stabilization work in perpetuity.

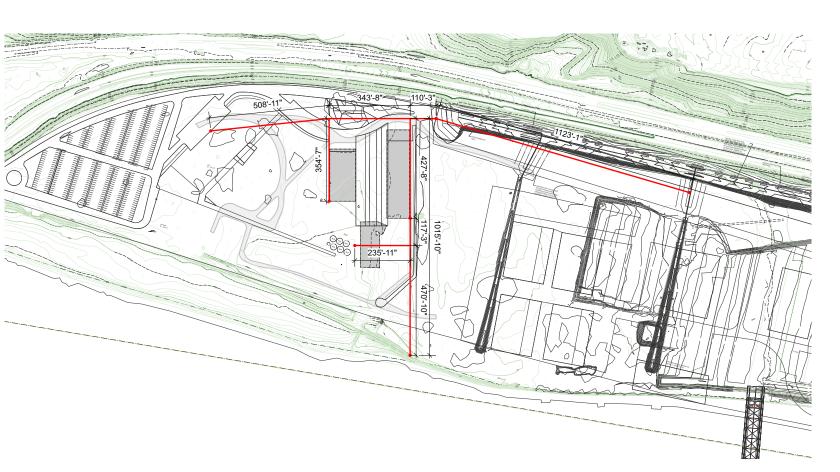


PILLAR 2: ENHANCEMENT

Investments in new facilities and amenities allow the Carrie Blast Furnaces to transform perspectives on the southwestern Pennsylvania's rich industrial legacy, while creating a vibrant, optimistic platform for envisioning the region's future. Interpretive experiences, hands-on activities, access to the river, and serving as a crucial connection to nearby trails will create a visitor experience unlike any other.

Integration with Neighboring Development

The Redevelopment Authority of Allegheny County (RAAC) and the Regional Industrial Development Corporation (RIDC) recently solidified plans to develop an adjacent, 50-acre brownfield site for various commercial uses, including flex-tech, biotech, R&D, and film production. Rivers of Steel is acting as an advisor to both the neighboring commercial development and the preservation / reuse of the Rankin Hot Metal Bridge, which sits just beyond the eastern boundary of the furnaces site. There is already close collaboration between all three entities, and this cross-sector partnership will extend to servicing the needs of eventual tenants.





Public Green Space

Currently inaccessible to the public outside of open hours, the Carrie Blast Furnaces' valuable and diverse riverfront property will transform into an open and inviting public green space in the shadow of these historic monuments.

With access to the river and acting as an important connector for nearby trails, this reimagined space will feature a waterfront pavilion, possible snack bar, and public restrooms, as well as a public boat dock with the capacity to moor Rivers of Steel's *Explorer* riverboat.

With the conversion of the former Hot Metal Bridge by Allegheny County into a pedestrian and bike path, neighboring communities will enjoy easier access to the river. By allowing public access to this stretch of riverfront property, Rivers of Steel's efforts will enhance those of the county, encouraging river recreation for communities that have been historically restricted from it and improving standards of living.

Expanded trail access on the northern, western, and southern sides of the site will also create new, more accessible links utilizing existing pathways and trails beneath the railway lines to the neighboring boroughs of Rankin and Swissvale. Rivers of Steel is also working closely with Allegheny County to advocate for extended Regional Transit Authority bus service to the base of Carrie Furnace Boulevard, thereby eliminating one of the biggest hurdles preventing economically challenged communities from accessing the site.

PILLAR 3: ACTIVATION

Enhancing the Carrie Blast Furnaces Through Programming

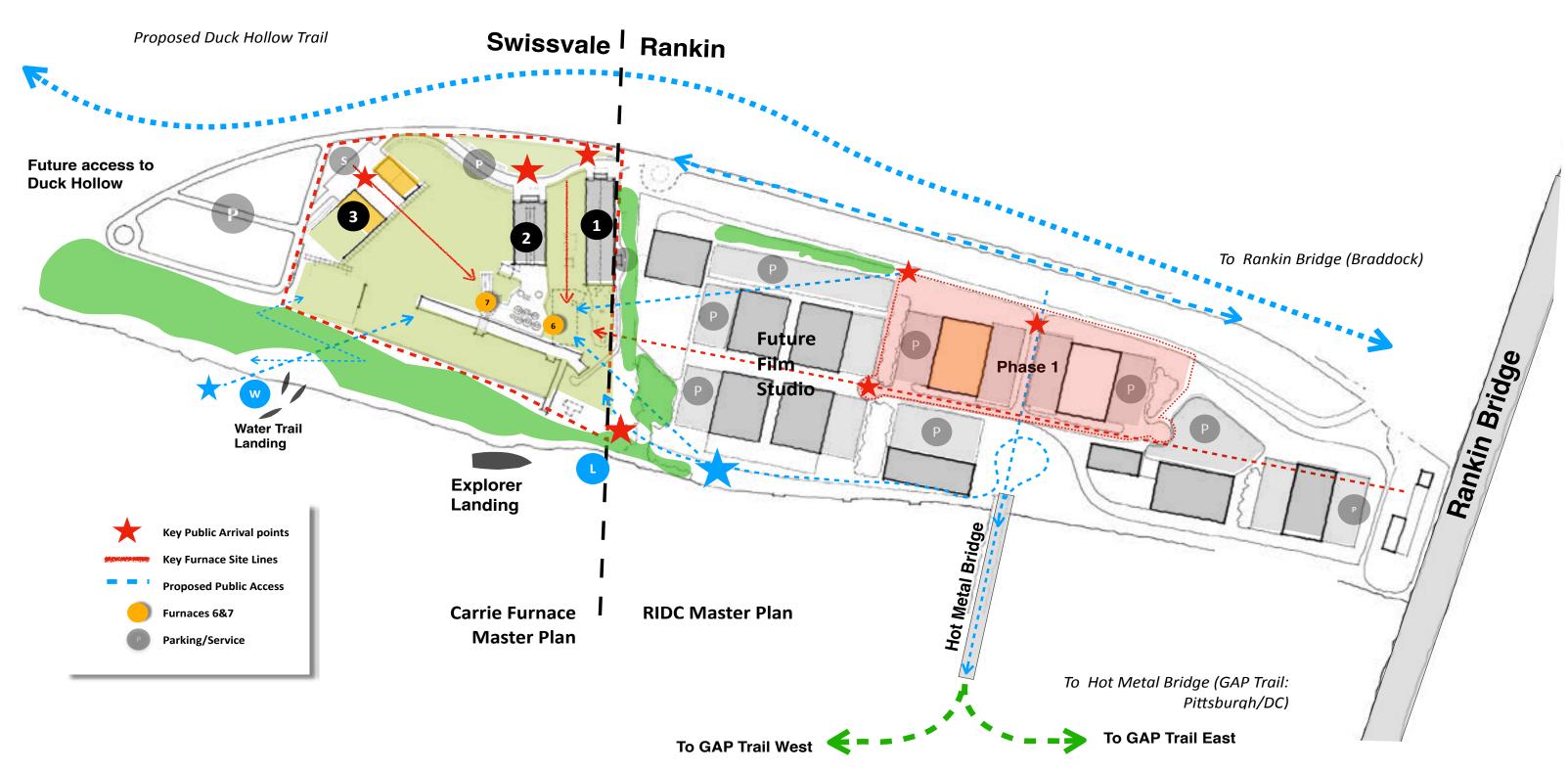
When the new Carrie Blast Furnaces Master Plan is implemented, the site will celebrate the industrial legacy of Pittsburgh, the Steel Valley, and southwestern Pennsylvania through enhanced delivery of Rivers of Steel's nationally distinguished Metal Arts, Heritage Arts, and Graffiti Arts programs, including workshops, festivals, and events that maximize the use and capabilities of new infrastructure. Further, the landmark site will become a locus for education and capacity-building programs that leverage historic preservation and skilled trades (metalworking, masonry, and carpentry) as avenues of economic opportunity. These investments will position Carrie Furnaces as "the heart of it all" once again, symbolic of the remarkable transformation of Pittsburgh's and southwestern Pennsylvania's economies.



Significant New Programming Investments:

- Expanded tours and interpretation both onsite and throughout the National Heritage Area that explore the historic, arts / cultural, and environmental impacts of steel manufacturing on the region, supported by a larger staff of curators and guides.
- Expanded liaison and concierge services to tour groups in the mid-Atlantic, and service-based amenities that support the adjacent commercial development.
- A commitment to building the local workforce through historic preservation workforce training that supports people who live and work near the furnaces.
- Revised and expanded programming that interprets Rivers of Steel's sites and archives through the lenses of Diversity, Equity, Access, and Inclusion and extends the reach of metal arts and other programming and events into Black, Indigenous, and People of Color (BIPOC) communities.
- A revised educational curriculum under Rivers of Steel's "Community Learning" vision that aligns interpretive historic and cultural programs at Carrie Furnaces and in local neighborhoods with environmental science programs onboard the *Explorer* riverboat, and creates synergies between Metal Arts, Heritage Arts, and Graffiti Arts programs.
- A commitment to creative placemaking on the furnaces site and the adjacent brownfield's redevelopment, through the commissioning and installation of works of sculpture produced at the new foundry as signature landscape elements.
- Curation and presentation of a signature arts experience at Carrie Furnaces every four to five years that presents metal and heritage arts in tandem with visual and performing arts.
- An expansion of Rivers of Steel's *Partners for Creative Economy*, including leadership training, capacity building, expanded mini-grants, programming partnerships, collaborative marketing, and heritage tourism initiatives with partnering organizations and municipalities throughout the eight-county National Heritage Area. This cross-sectoral approach will build local leaders and invest in the future success of the region's cultural and heritage assets.





Rivers of Steel • Carrie Furnace Master Plan
PFAFFMANN + ASSOCIATES Updated March 2024

Carrie Furnace Site Context



Blowing Engine House Visitor Center

Once a vital component of the functioning mill, the historic Blowing Engine House will be renovated as a visitor center to house Rivers of Steel's vast archive, a study area for scholars and researchers, permanent and temporary exhibition spaces, and multipurpose education spaces in a three-story "building within the building." This location will also feature expansive interpretive exhibits in the historic space, such as a massive reconfigured 48-inch rolling mill, the last of its kind in the world, and resources for exploring attractions throughout the Rivers of Steel National Heritage Area.

Here, the diverse stories of steelworkers, their families, and communities will be told, welcoming the general public, students, academics, historians, technologists, and others, to understand, appreciate, and interpret the site's rich legacy of industrial innovation. Archival displays, featuring massive machinery, tools, and ephemera from workers and manufacturers—plus oral histories, blueprints, patterns, and more—will explore the region's rich and diverse cultural traditions. Envisioned exhibits will focus on the pivotal role played by the steel industry in the Great Migration of African Americans from the Deep South, the environmental impacts of steel production, the crushing blow to economic fortunes in the Mon Valley following the closure of the mills, and major trends defining the region's future.



AC Power House Events Center

The vast AC Power House is currently an overextended multipurpose space, accommodating special events and private rentals and providing the only workshop area for the metal arts program. In the new Master Plan vision, this building's primary use will focus on events, rentals, possibly concerts and film screenings, ROS education programs, and large-scale art exhibitions. Upgraded with a warming kitchen, restrooms, HVAC, and office space, the AC Power House will retain the gritty aesthetic and large-format graffiti murals that make it so popular with event promoters and rental clients while continuing to serve as the main gathering space for Rivers of Steel's own large-scale festivals and events.



ARTS AND OPERATIONS HOUSE

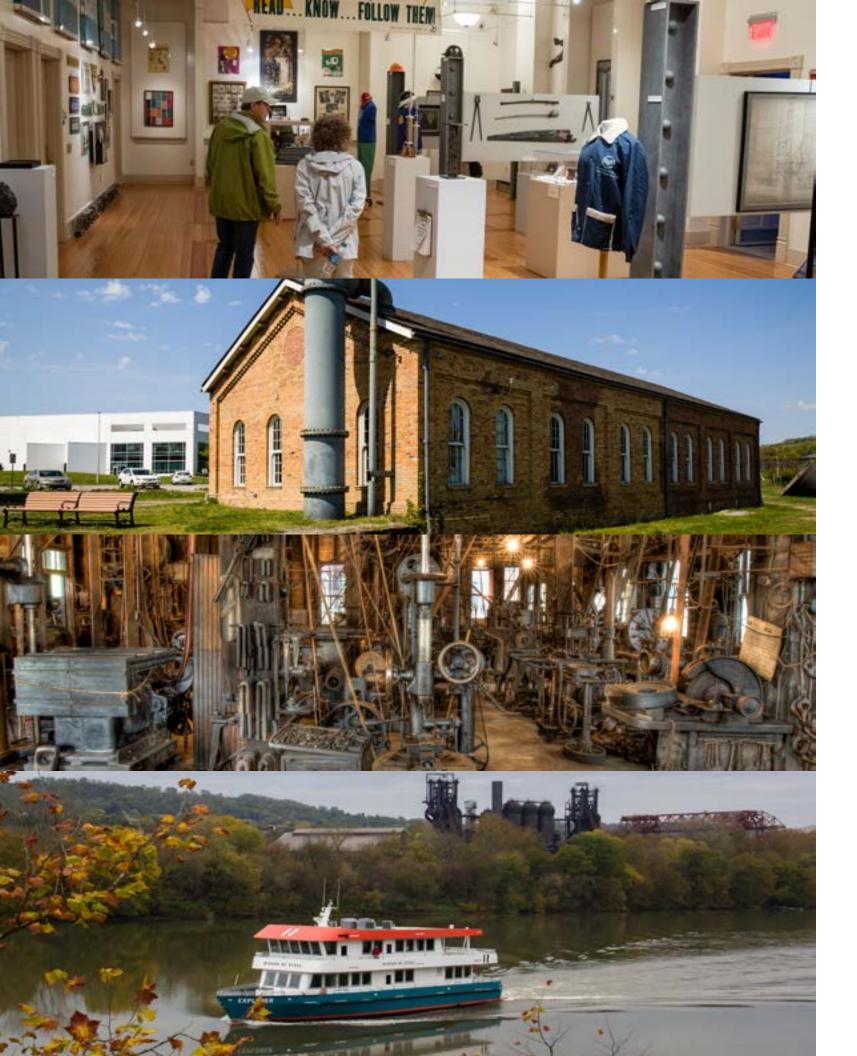




Arts programming at Rivers of Steel continues to expand its influence regionally and nationally, having emerged in recent years as a crucial arm of the organization's vision for community development and economic growth throughout the National Heritage Area. While future phases of the Master Plan implementation will feature a new state-of-the-art center for the arts at Carrie, the one new building currently being proposed will house all of Rivers of Steel's arts programs as well as an operations hub for the site, providing similar square footage to their current space but without the need to move out every time there is a rental or other event.



The metal arts program, which is quickly establishing itself as one of the premier destinations for creative foundry work and metal arts in the world, has experienced substantial growth in recent years, selling out workshops and regularly attracting established artists from around the country. For this reason, it has become clear during the planning process that a dedicated space for this program is necessary. The new Arts and Operations House will house all site maintenance operations and equipment and will play a vital role in the continued preservation and upkeep of the built-out campus.



Other Historic Sites & Assets

In addition to the Carrie Blast Furnaces site, Rivers of Steel owns and operates a number of other historical assets throughout the National Heritage Area, which will serve as linchpins for collaborative marketing, magnets for community placemaking, and physical programming facilities that reinforce the "Hub and Spoke" vision.

The Bost Building National Historic Landmark, located in Homestead, Pennsylvania, will be repurposed as a vibrant cultural space for local community engagement and historical interpretation of the important labor history of Homestead and the region. It will also serve as a base for Rivers of Steel's Heritage Arts program—recognized by the Commonwealth of Pennsylvania as one of fourteen regional folklife centers in the state.

The Historic Pump House and Water Tower in nearby Munhall is the site of the 1892 Battle of Homestead, one of the seminal events in the history of the U.S. labor movement. Rivers of Steel will make upgrades to this site and add the infrastructure and staffing necessary to make it more accessible to visitors to learn about its importance in labor history through interpretation and lectures while being more attractive for rental purposes. It also physically represents the spirit of regional connectivity envisioned by Rivers of Steel as a trailhead for the Great Allegheny Passage, promoting the region's unique heritage assets and opportunities to tens of thousands of bikers and hikers each year.

& Sons Foundry and Machine Shop National Historic Landmark will serve as one of Rivers of Steel's many cultural and historic outposts throughout the National Heritage Area. Through expanded community programs and promotional synergy with nearby partners, this site will connect mid- and upper-Monongahela River Valley communities with the Carrie Blast Furnaces, serving as a staging point for regional tourism.

Rivers of Steel's *Explorer* riverboat is the crucial asset connecting the Carrie Blast Furnaces to downtown Pittsburgh. Currently moored on the Ohio River next to the Carnegie Science Center, Rivers of Steel will develop new, historically inspired river ecology and environmental education programs aboard the *Explorer* and bring visitors directly to the Carrie Blast Furnaces via a new public dock that provides river access to the landmark site.

THE CAMPAIGN

Timeline and Components

Phase 1: Preservation and Stabilization

This phase involves the preservation and stabilization of the historic structures and perimeter security enhancements, which has already begun and for which \$8.586 million has already been raised. In addition to the preservation / stabilization capital projects, ROS will raise \$7 million in endowment to support ongoing preservation maintenance in perpetuity.

Phase 2: New Infrastructure, Renovation, and Reuse

This phase includes renovation of the AC Power House Events Center, the Blowing Engine House Visitor Center, and construction of a new arts and operations building; and visitor accessibility around the historic plant.

Phase 3: Visitor Amenities and Enhancements

This phase features enhancements to public green space, riverfront access, and visitor amenities.

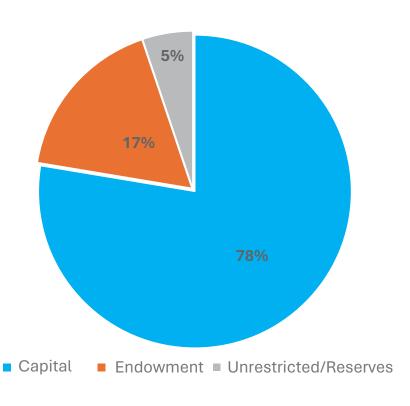
When this work is complete, Rivers of Steel will welcome the world to engage with the unique and complex legacy of our region and celebrate its diversity and promise as exemplified by the Carrie Blast Furnaces, Rivers of Steel's other historic sites, and the rich tapestry of missionaligned destinations throughout the eight-county National Heritage Area.

The Carrie Blast Furnaces represent a great story of American ingenuity, to which we are now adding perseverance and imaginative renewal. The site's enhancement will be a catalyst for historic preservation and interpretation, heritage tourism, community development, and creative placemaking that encourages visitors from all walks of life to draw inspiration from our story and understand how we draw on our heritage to shape the future of our region.

Breakdown of Costs

Capital = \$33,185,000 Endowment = \$7,000,000 Unrestricted/Reserves = \$2,000,000

Total Campaign = \$42,185,000



PROGRAM SUMMARY

		Program Areas (NSF)	Existing Area (GSF)	New Gross Area (GSF)
1	Events Building (Power House)	36,050	37,300	4,600
2	Exhibition & Archives Building (Blowing Engine House)	30,580	32,935	16,000
3	Arts & Operations Building (New Construction)	19,329	0	20,500
	Subtotal	85,959	70,235	41,100
	TOTAL MASTER PLAN (New & Rehab)			111,335

Note: For the purposes of this master plan areas are defined as follows:

Program Area (Net Square feet: NSF) is defined as assignable or useable area for a use, including internal walls circulation, toilets rooms etc)

Gross Area (GSF) is the exterior footprint of a building and includes exterior walls, structure, mechanical space and other non-occupied spaces

